

CITY OF CANTON, OHIO

GP 1137-WAYNESBURG DRIVE SE SANITARY SEWER REHABILITATION

NOVEMBER 2010

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PUBLIC AGENCIES/ UTILITY CONTACTS

NATURAL GAS
DOMINION EAST OHIO GAS
DISTRIBUTION & TRANSMISSION
320 SPRINGSIDE DRIVE
AKRON, OHIO 44333
330-664-2409
ATTN: MARY LONG
EMERGENCY NO.
1-800-521-4400

COMMUNICATIONS CABLE
TIME WARNER CABLE
5520 WHIPPLE AVE N.W.
NORTH CANTON, OHIO 44720
330-494-9200, EXT. 87
ATTN: TIM KNIGHT

SANITARY AND STORM SEWER
CITY ENGINEER'S OFFICE
2436-30TH ST. N.E.
CANTON, OHIO 44705
ATTN: DAN MOEGLIN, P.E., S.I.
330-489-3381

WATER
WATER DEPARTMENT
2664 HARRISBURG RD. N.E.
CANTON, OHIO 44708
330-489-3310
ATTN: LEWI MILLER

ODOT DISTRICT 4
2088 SOUTH ARLINGTON ROAD
AKRON, OHIO 44306
800-603-1054
ATTN: KEN GREENE

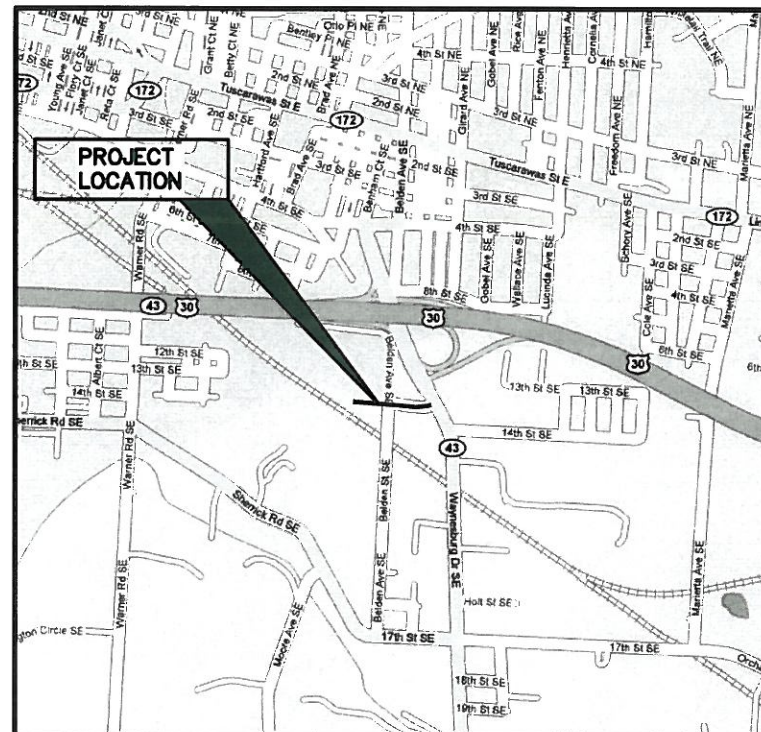
TELEPHONE
AT&T
50 WEST BOWER STREET
AKRON, OHIO 44308
330-384-8057
ATTN: JIM BUETEL
EMERGENCY NO. - 24 HRS.
1-800-572-4545 OPTION#4

ELECTRIC
AMERICAN ELECTRIC POWER
301 CLEVELAND AVE. S.W.
P.O. BOX 24400
CANTON, OHIO 44701-4400
330-438-7762
ATTN: KEN HUOT
EMERGENCY NO.
1-800-672-2017

SANITARY SEWER
STARK COUNTY SANITARY
1701 MAHONING ROAD NE
CANTON, OHIO 44705
330-451-2303
ATTN: JIM JONES, P.E.

TRAFFIC INTERCONNECT
CITY ENGINEER'S OFFICE
2436-30TH ST. N.E.
CANTON, OHIO 44705
330-489-3370
ATTN: NICK LOUKAS, P.E.

CANTON TOWNSHIP
ROAD SUPERINTENDANT
4711 CENTRAL AVE. S.E.
CANTON, OHIO 44707
330-484-2501
ATTN: TOM HEWITT



VICINITY MAP
N.T.S.

ENGINEER/ SURVEYOR

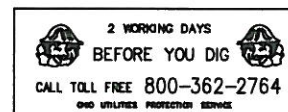
HAMMONTREE & ASSOCIATES, LTD.
5233 STONEHAM RD.
NORTH CANTON, OHIO 44720

ATTN: THOMAS POWELL, P.E.
TELE: (330) 499-8817
FAX: (330) 499-0149

OWNER

CITY OF CANTON, OHIO
2436 30TH STREET N.E.
CANTON, OHIO 44705

ATTN: DANIEL MOEGLIN, P.E., S.I.
TELE: (330) 489-3381
FAX: (330) 489-3337



APPROVALS

APPROVED BY: Dan Moeglin 11/17/10
DANIEL MOEGLIN, P.E., S.I.-CANTON CITY ENGINEER DATE

APPROVED BY: Thomas R. Powell 11/19/10
THOMAS R. POWELL, P.E.-HAMMONTREE & ASSOCIATES, LIMITED DATE
REGISTERED ENGINEER NO. E-45970

APPROVED BY: ODOT VIA PERMIT STA 43-59 DATED: JULY 20, 2010

MODIFICATIONS DATED 11/1/2010

APPROVED BY: Douglas J. Harris 11/18/10
DOUGLAS J. HARRIS, P.E. - SANITARY ENGINEER, CANTON DATE
REGISTERED ENGINEER NO. 70789

CITY OFFICIALS

MAYOR: WILLIAM J. HEALY II

SERVICE DIRECTOR: WARREN R. PRICE

SAFETY DIRECTOR: THOMAS REAM

COUNCIL MEMBERS

WARD 1: GREG HAWK

WARD 2: THOMAS E. WEST

WARD 3: JAMES E. GRIFFIN

WARD 4: CHRIS SMITH

WARD 5: TERRY PRATER

WARD 6: DAVID R. DOUGHERTY

WARD 7: PATRICK BARTON

WARD 8: MARK BUTTERWORTH

WARD 9: BRIAN HORNER

AT-LARGE: MARY M. CIRELLI

AT-LARGE: JOE COLE

AT-LARGE: BILL SMUCKLER

COUNCIL PRESIDENT: ALLEN SCHULMAN

2008 SPECIFICATIONS

THE WORK UNDER THIS PROJECT SHALL COMPLY WITH THE GENERAL, SUPPLEMENTAL AND TECHNICAL SPECIFICATIONS PROVIDED WITH THE CONTRACT, THE CITY OF CANTON, STANDARD CONSTRUCTION DRAWINGS AND THE LATEST EDITION OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON-ARON-PITTSBURGH
5233 STONEHAM ROAD NORTH CANTON, OHIO 44720
CANTON: (330) 499-8817 ARON: (330) 633-7274
TOLL FREE: 1-800-394-8817 FAX: (330) 499-0149
WWW.HAMMONTREE-ENGINEERS.COM

REV.	BY	DATE	DESC.
1	CMK	11/01/10	PER CITY COMMENTS
2	CMK	11/01/10	PER CITY COMMENTS
3	CMK	11/01/10	PER CITY COMMENTS
4	CMK	11/01/10	PER CITY COMMENTS
5	CMK	11/01/10	PER CITY COMMENTS
6	CMK	11/01/10	PER CITY COMMENTS
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8	CMK	11/01/10	PER CITY COMMENTS
9	CMK	11/01/10	PER CITY COMMENTS
10	CMK	11/01/10	PER CITY COMMENTS

SCALES
HORIZ: N/A
VERT: N/A
CONTOUR: INT: N/A

TITLE SHEET
GP 1137-WAYNESBURG DRIVE SE
SANITARY SEWER REHABILITATION
FOR: THE CITY OF CANTON
LOCATED IN THE CITY OF CANTON/CANTON TOWNSHIP
SECTION 14 NW, STARK COUNTY, OHIO

$$\frac{3}{10}$$

VIII. WATER MAIN / SERVICES:

(A) WATER MAINS/SERVICES:

ALL WATER MAINS, SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE CITY OF CANTON WATER DEPARTMENT REQUIREMENTS AND SPECIFICATIONS IN EFFECT AT THE TIME OF CONSTRUCTION. ANY DEVIATION FROM THE PLANS AFFECTING THE WATER SYSTEM MUST BE APPROVED BY THE CANTON WATER DEPARTMENT.

WATER MAINS SHALL BE CLASS 53 (12" AND UNDER) OR CLASS 54 (OVER 12") DUCTILE IRON MEETING AWWA C-151 WITH PUSH JOINTS. THE MINIMUM COVER OVER WATER MAINS SHALL BE 4'-6" FROM GROUND SURFACE TO THE BARREL OF THE PIPE. THE OUTSIDE SURFACE OF ALL DUCTILE IRON PIPE, FITTINGS, AND APPURTENANCES SHALL BE SHOP COATED WITH EITHER A COAL TAR OR ASPHALT BASE BITUMINOUS MATERIAL. IF THE COATING MATERIAL IS FOUND TO BE DAMAGED PRIOR TO THE PIPE TRENCH BEING BACKFILLED, THE CONTRACTOR SHALL PROVIDE AN ADDITIONAL APPROVED MATERIAL AS REQUIRED TO REPAIR THE DAMAGES. THE CONTRACTOR SHALL HAVE SUFFICIENT COATING MATERIAL AVAILABLE AT THE JOB SITE PRIOR TO LAYING THE PIPE. THE INTERIOR OF ALL PIPES AND FITTINGS SHALL BE LINED WITH DOUBLE CEMENT MORTAR AND SEAL COATED IN COMPLETE CONFORMANCE WITH AWWA C-104, OR THE LATEST REVISION. FITTINGS SHALL BE RATED FOR 250 PSI WORKING PRESSURE IN ACCORDANCE WITH AWWA C-153. PIPE LENGTHS MAY BE DEFLECTED AT THE JOINT IF REQUIRED, AT ONE-HALF THE DEGREE RECOMMENDED BY THE MANUFACTURER. WATER SERVICES WILL BE INSTALLED BY THE CITY OF CANTON AND PAID FOR BY THE OWNER/DEVELOPER. DISINFECTION OF WATER MAINS SHALL BE IN ACCORDANCE WITH AWWA C-651. ALL WATER LINE PRESSURE TESTING SHALL CONFORM TO AWWA C-600.

WATER MAINS SHALL BE INSTALLED AND BACKFILLED PER O.D.O.T. ITEM 638. WATERLINES LOCATED WITHIN THE LIMITS OF OR WITHIN A 1/2 TO 1 SLOPE OF EXISTING AND/OR PROPOSED ROADWAYS, PARKING AREAS, BUILDINGS, BUILDINGS, SIDEWALKS, AND/OR DRIVES SHALL BE INSTALLED AS TYPE B CONDUITS. ALL OTHER WATER MAINS MAY BE INSTALLED AS TYPE C CONDUITS. BEDDING SHALL BE AS SPECIFIED, EXCEPT THAT SLAG WILL NOT BE PERMITTED.

ALL BENDS, FITTINGS, TEES, VALVES, DEAD ENDS, ETC. SHALL BE SECURED EQUAL. POURED-IN-PLACED CONCRETE THRUST BLOCKS SHALL ALSO BE PROVIDED AT/FOR EACH BEND, FITTINGS, TEE, DEAD END, ETC. THIS BLOCKING SHALL BE CAREFULLY PLACED TO ENSURE IT IS POSITIONED PROPERLY TO WITHSTAND THE RESULTANT FORCES AT EACH BEND, FITTING, ETC. AND SHALL BEAR ON STABLE UNDISTURBED GROUND CAPABLE OF WITHSTANDING THE POTENTIAL LOADING.

IN ADDITION TO THE RESTRAINT OF ALL BENDS, FITTINGS, TEES, VALVES, DEAD END, ETC. THE CONTRACTOR SHALL ALSO SECURE/RESTRAIN ALL JOINTS FOR AT LEAST THREE (3) PIPE JOINTS (50) LF MIN.) ON BOTH SIDES OF EACH DEAD END, BEND, FITTING, VALVE, TEE, ETC. UTILIZING MEGALUGS, FIELD LOK GASKETS, OR APPROVED EQUAL.

THE CONTRACTOR SHALL PROVIDE 18" VERTICAL CLEARANCE BETWEEN PROPOSED WATERLINES AND ANY SANITARY SEWERS. WHEN 18" CLEARANCE BETWEEN A WATERLINE AND SANITARY SEWER CANNOT BE OBTAINED THE CONTRACTOR SHALL PROVIDE CONCRETE ENCASEMENT AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE 12" MINIMUM CLEARANCE BETWEEN WATERLINE AND STORM SEWER. THE CONTRACTOR SHALL MAINTAIN TEN (10) FOOT HORIZONTAL CLEARANCE BETWEEN WATERLINES/SERVICES AND SANITARY SEWERS AND FOUR (4) FOOT HORIZONTAL CLEARANCE BETWEEN WATERLINES/SERVICES AND STORM SEWERS.

FIRE HYDRANTS SHALL BE MUELLER A423 MEETING THE CITY OF CANTON WATER DEPARTMENT STANDARDS AND REQUIREMENTS. ALL COSTS FOR THE 6" PIPING ASSOCIATED WITH THE INSTALLATION OF FIRE HYDRANTS SHALL BE INCLUDED WITH THE FIRE HYDRANT PAY ITEM. ALL HYDRANTS WILL BE INSTALLED WITH THE PUMPER NOZZLE FACING THE STREET.

ALL WATER SERVICES MUST BE INSTALLED BEFORE ANY PAVEMENT FOR THE PROPOSED ROADWAYS HAS BEEN PLACED. CONTRACTOR IS NOT TO MAKE ANY SERVICE TAPS ON THE WATER MAIN. THE CANTON WATER DEPARTMENT WILL MAKE ALL SERVICE TAPS.

THE PROPOSED FACILITIES WILL MAINTAIN A MINIMUM 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.

ALL DUCTILE IRON PIPE, INCLUDING FITTINGS AND APPURTENANCES BURIED UNDERGROUND, SHALL BE ENCASED WITH 8 MIL POLYETHYLENE FILM CONFORMING TO AWWA C105.

POLYETHYLENE WATER MAIN AND SERVICE TUBING 2" AND UNDER SHALL BE COPPER TUBE SIZE AND MEET STANDARDS ASTM-D2737 PE3408 AND AWWA C906. THE ONLY ACCEPTED TUBING IS CP CHEM PERFORMANCE PIPE DRISCOPLEX 5100-ULTRA-LINE.

ANY WATER SERVICE LINE THAT IS BROKEN, CUT OR OTHERWISE DAMAGED, SHALL BE REPLACED FROM THE CORPORATION STOP TO THE CURB STOP WITH A SINGLE PIECE OF PLASTIC SERVICE LINE (DRISCCOMPLEX). NO SPLICING OF THE SERVICE LINE WILL BE PERMITTED.

SERVICE BRANCHES WILL BE INSTALLED AS PER O.D.O.T ITEM 638.16 WITH THE FOLLOWING EXCEPTIONS:

1. WHEN A SERVICE BRANCH IS DISTURBED FOR LOWERING, RAISING, EXTENDING OR SHORTENING ON THE PROPERTY SIDE ON THE SERVICE STOP, IT SHALL BE REPLACED WITH NEW MATERIALS FROM THE CORPORATION STOP TO THE SERVICE STOP.

IN A STREET IMPROVEMENT, NO EXISTING WATER CURB BOX WILL BE LEFT IN THE PAVEMENT, CURB AND GUTTER OR SIDEWALK. THE CURB BOX WILL BE MOVED TO A SUITABLE LOCATION DETERMINED BY THE CANTON WATER DEPARTMENT. WHEN THE CURB BOX IS MOVED ALL NEW MATERIAL WILL BE USED FROM THE CORPORATION STOP TO THE THE CURB STOP WHICH IS A SINGLE PIECE OF PLASTIC SERVICE LINE (DRISCOPEX). NO SPLICING OF THE SERVICE LINE WILL BE PERMITTED. A NEW TAP (CORPORATION STOP) AND CURB STOP AND BOX MAY ALSO BE REQUIRED. THE DETERMINATION WILL BE MADE BY THE CANTON WATER DEPARTMENT.

ALL WATER MAINS WILL BE INSTALLED UNDER THE PAVEMENT WITH A MINIMUM OF 3 FEET FROM THE EDGE OF PAVEMENT OR THE CURB AND/OR GUTTER. IN EXISTING STREETS, A SAW CUT WILL BE MADE TO ENSURE A CLEAN EDGE.

WHEN AN EXISTING WATER MAIN MUST BE SHUT DOWN TO PERFORM REQUIRED WORK, THE PROPERTIES TO BE EFFECTED SHALL BE GIVEN A MINIMUM 24 HOUR NOTICE OF SAID SHUT DOWN. THE WORK WILL BE SCHEDULED AND COORDINATED TO MINIMIZE THE TIME THE MAIN IS OUT OF SERVICE.

THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS IN ADVANCE OF ANY SHUT DOWN OF AN EXISTING WATER MAIN. THE CONTRACTOR WILL NOT OPERATE ANY VALVES. VALVES WILL BE OPERATED BY CANTON WATER DEPARTMENT PERSONNEL ONLY. VALVES DAMAGED BY THE CONTRACTOR'S OPERATION WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ALL VALVE BOXES WILL BE ADJUSTED TO FINAL GRADE OF THE PAVEMENT WHEN THE PROJECT IS COMPLETED.

(A) AS-BUILT DRAWINGS (PRIVATE PROJECTS):

AS-BUILT REPRODUCIBLE MYLARS SHALL BE PROVIDED TO THE CITY OF CANTON BY THE DESIGN ENGINEER AT THE COMPLETION OF THE PROJECT. THE CONSTRUCTION BOND WILL NOT BE RELEASED UNTIL THE AS-BUILT DRAWINGS HAVE BEEN ACCEPTED.

THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IN WRITING
UPON THE COMPLETION OF MONUMENTS BEING SET AS PER
PLAN OR RECORD PLAT.

PRIOR TO THE RELEASE OF RETAINER/CONSTRUCTION BOND BY THE CITY OF CANTON, THE CONTRACTOR SHALL HAVE COMPLETED THE ENGINEER'S PROJECT PUNCHLIST AND SUBMIT FINAL WAIVER OF LIEN, IN ACCORDANCE WITH CITY SS 01-00.

PT. NO.	NORTHING (Y)	EASTING (X)	ELEV.
10	409769.03	2287471.84	1057.43
51	409816.44	2287510.63	1059.24
55	409745.16	2287053.87	1049.54

R/W	RIGHT OF WAY
CL	CENTER LINE
PL	PROPERTY LINE
LL	LOT LINE
O	EX. MONUMENT FOUND (AS NOTED)
●	1/2 INCH IRON BAR W/ H&A CAP SET
()	RECORD BEARINGS & DISTANCES
E.O.P.	EDGE OF PAVEMENT
F.F.	FINISH FLOOR ELEVATION
————	FENCE (AS NOTED)
————	GUARD RAIL
■	MAILBOX
●	POST
⊕	POWER POLE
⊕	TELEPHONE POLE
⊕	TELEPHONE/ LIGHT POLE
⊕	TELEPHONE/ POWER POLE
⊕	GENERAL POLE
⊕	LIGHT POLE
⊕	LIGHT/ POWER POLE
⊕	LIGHT/ POWER/ TELEPHONE POLE
⊕	LIGHT/ POWER/ TELEPHONE, CABLE TV POLE
⌋	ANCHOR
————	RAIL ROAD
↑	SIGN (AS NOTED)
●	TREE (AS NOTED)
⌒	H.C. RAMP W/ TRUNCATED DOME
T/G	TOP OF GRATE
T/C	TOP OF COVER
FL	FLOW LINE
-TV-	CABLE LINE
■	CABLE BOX
-E-	ELECTRIC LINE
■	ELECTRIC BOX
-G-	GAS LINE
Ⓢ	GAS LINE MARKER
-S-	SANITARY SEWER LINE
O	EX. MANHOLE (AS NOTED)
●	PROP. MANHOLE (AS NOTED)
CO	CLEAN OUT
-ST-	STORM SEWER LINE
□	EX. STORM C.B.
■	PROP. STORM C.B.
YD	YARD DRAIN
FD	FLOOR DRAIN
RD	ROOF DRAIN
DS	DOWN SPOUT
-T-	TELEPHONE LINE
■	TELEPHONE BOX
-W-	WATER LINE
⌋	EX. FIRE HYDRANT
⌋	PROP. FIRE HYDRANT
⌋	EX. VALVE (AS NOTED)
⌋	PROP. VALVE (AS NOTED)
————	EX. CONTOUR LINE
————	PROP. CONTOUR LINE
980	CONTOUR LABEL
980.25 979.75	SPOT ELEVATION
◆	SOIL BORING

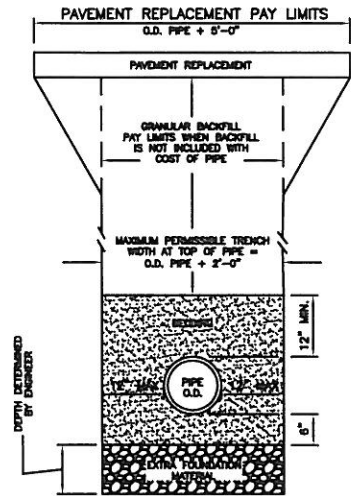
® HAMMONDREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON—AKRON—PITTSBURGH

5233 STONEHAM ROAD NORTH CANTON, OHIO 44720
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TOLL FREE: 1-800-394-8817 FAX: (330)/498-0149
www.hammondree-engineers.com

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SCALES
HORIZ: N/A
VERT: N/A
CONTOUR. INT: N/A

**GP 1137-WAYNESBURG DRIVE SE
SANTARY SEWER REHABILITATION**
FOR: THE CITY OF CANTON
LOCATED IN THE CITY OF CANTON/CANTON TOWNSHIP,
SECTION 14 NW, STARK COUNTY, OHIO

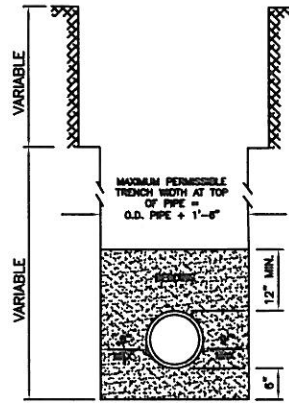


GRANULAR BACKFILL, PAVEMENT & EXTRA FOUNDATION MATERIAL PAYMENT LIMITS

EXTRA FOUNDATION MATERIAL

DEFINITION: WHEN IN THE OPINION OF THE ENGINEER, SOFT UNSTABLE MATERIALS ARE ENCOUNTERED WHICH ARE UNSUITABLE FOR BEDDING FOUNDATION, SAID MATERIAL SHALL BE REMOVED BY THE CONTRACTOR TO THE DEPTH DIRECTED BY THE ENGINEER AND REPLACED WITH SUITABLE MATERIAL. IF SUITABLE REPLACEMENT MATERIALS ARE NOT FOUND IN EXCAVATION, THEY SHALL BE PAID FOR UNDER THIS SECTION.

MATERIAL: SHALL CONSIST OF RUN-OF-MINE GRAVEL, GRAVEL, CRUSHED STONE OR SLAG TO THE SATISFACTION OF THE ENGINEER.



ROCK EXCAVATION PAY LIMITS

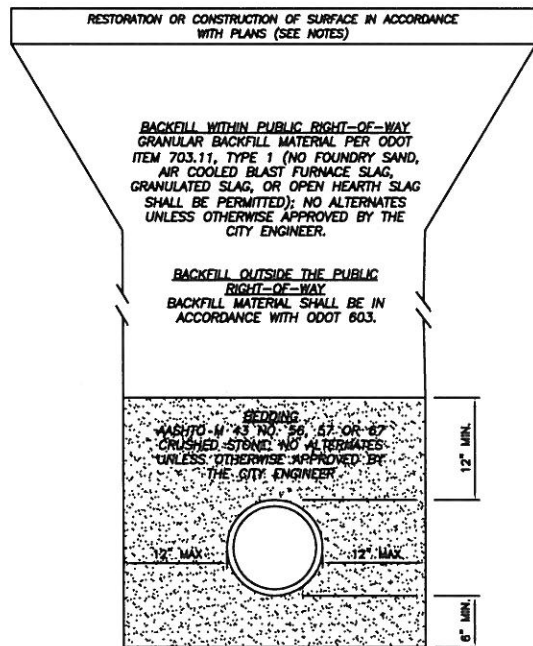
PAYMENT: THE PRICE BID AND PAID THE CONTRACTOR FOR EXTRA FOUNDATION MATERIAL SHALL BE PER CUBIC YARD PLACED, AS NAMED IN THE PROPOSAL THEREFOR, AND SHALL INCLUDE ALL LABOR AND MATERIALS INCIDENTAL TO THE FURNISHING AND PLACING OF EXTRA FOUNDATION MATERIAL INCLUDING THE EXCAVATION OF THE MATERIAL TO BE REPLACED, SHEETING, BRACING, PUMPING, DRAINING, REMOVAL OF SURPLUS MATERIALS AND GRADING OF THE EXTRA FOUNDATION MATERIAL.

STRUCTURES: ROCK EXCAVATION FOR STRUCTURES, UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS, SHALL BE MEASURED BETWEEN VERTICAL PLANES ONE (1) FOOT BEYOND THE NEAT LINES OF THE FOUNDATION OF THE STRUCTURES ON ALL SIDES, AND PARALLEL THERETO, AND FROM THE SURFACE OF THE ROCK TO THE NEAT LINES OF THE BOTTOM OF THE STRUCTURES.

OFFICE OF THE CITY ENGINEER
CANTON, OHIO
DANIEL J. MOEGLIN, P.E., CITY ENGINEER
2438 30th STREET N.E. 44705 (330)489-3381

STANDARD DRAWING NO. 32
PAY LIMITS - TRENCHES,
ROADWAYS & STRUCTURES

REVISIONS			DRAWN BY:	DJH	DATE:	AUGUST 2009
DESCRIPTION	DATE	BY	APP'D BY:	RMB	H. SCALE:	N/A
			FIELD BK:		V. SCALE:	N/A
			DWG#		SHEET	1 OF 1



NOTES:

BEDDING FOR REINFORCED CONCRETE PIPE SHALL EXTEND 3" BELOW THE BOTTOM OF PIPE AND FLUSH WITH THE TOP OF PIPE.

INSTALLATION METHODS OF BACKFILL AND BEDDING MATERIAL SHALL CONFORM WITH ODOT 603. ALL BACKFILL UNDER STREET PAVEMENT SHALL BE PLACED IN LAYERS NOT TO EXCEED 8-INCHES LOOSE DEPTH AND COMPACTED BY APPROVED MECHANICAL MEANS. ALL MATERIALS USED UNDER PAVEMENTS SHALL BE GRANULAR MATERIAL (PER THE ABOVE NOTED REQUIREMENTS), AND SHALL CONTAIN NO CLAY. JETTING IS NOT APPROVED WITHOUT THE CITY ENGINEER'S APPROVAL.

TRENCH SURFACE: ALL TRENCHES SHALL BE TOPPED WITH 4" OF ODOT 304 LIMESTONE WITHIN EXISTING ROADWAY PAVEMENTS WHEN THE ROADWAY WILL BE OPENED TO VEHICULAR TRAFFIC PRIOR TO PAVEMENT REPLACEMENT. THE TRENCH TOPPING MATERIAL SHALL BE ROLLED OR OTHERWISE COMPLETED FLUSH WITH THE ADJOINING PAVEMENT.

ROAD PAVEMENTS SHALL BE REPLACED IN ACCORDANCE WITH CITY STANDARD DRAWING NO. 44

LAWN SURFACES SHALL BE REPLACED WITH A MINIMUM OF 4" TOPSOIL, SEEDED, AND MULCHED. SEED MIX SHALL CONFORM TO ADJOINING LAWN GRASS.

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CANTON, OHIO
DANIEL J. MOEGLIN, P.E., CITY ENGINEER
2438 30th STREET N.E. 44705 (330)489-3381

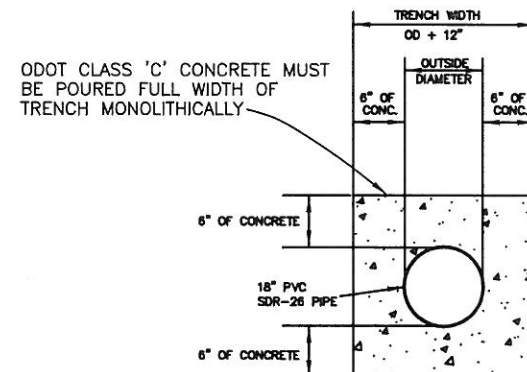
STANDARD DRAWING NO. 29
BACKFILL & BEDDING FOR
UTILITY DITCHES

REVISIONS			DRAWN BY:	DJH	DATE:	AUGUST 2009
DESCRIPTION	DATE	BY	APP'D BY:	RMB	H. SCALE:	N/A
			FIELD BK:		V. SCALE:	N/A
			DWG#		SHEET	1 OF 1

SHEET NO.	REFERENCE NO.	STATION TO STATION	CONSTRUCTION STAKING						
			LUMP	LF.	LF.	LUMP	LUMP	LF.	LUMP
7-8			1						
7	SL-1	STA. 10+00-STA. 11+72		172					
8	SR-1	STA. 101+84-STA. 102+24			50				
9	BP-1					1			
8							1		
8	RC-1	STA. 102+16-STA. 102+40						24	
8									1
TOTAL			1	172	50	1	1	24	1

NOTE: THE UNIT PRICE FOR THE SEWER REPLACEMENT ITEM IN THE BID SHALL INCLUDE VIDEO TELEVISIONING OF THE SANITARY SEWER LINE AFTER THE REPLACEMENT OF THE SEWER TO OBSERVE THE CONNECTION TO THE EXISTING SANITARY SEWER UPSTREAM AND DOWNSTREAM OF THE REPLACEMENT PIPE.

GENERAL SUMMARY OF QUANTITIES



CONCRETE ENCASEMENT
NOT TO SCALE

HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON-AKRON-PITTSBURGH
5233 STONEHAM ROAD NORTH CANTON, OHIO 44705
CANTON (330) 489-3817 AKRON (330) 483-2724
TOLL FREE: (800) 367-8817 FAX: (330) 489-0148
www.hammontree-engineers.com

DESC.	DATE	REV. BY	DATE	DESC.	DATE	REV. BY	DATE	DESC.	DATE	REV. BY	DATE
PER CITY COMMENTS	11/1/10	DJH		PER CITY COMMENTS	9/29/09	TRP		PER CITY COMMENTS	9/11/09	CMK	
PER CITY COMMENTS	9/29/09	CMK		PER CITY COMMENTS	9/11/09	CMK		PER CITY COMMENTS	9/11/09	CMK	
PER CITY COMMENTS	9/11/09	CMK		PER CITY COMMENTS	9/11/09	CMK		PER CITY COMMENTS	9/11/09	CMK	
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FLD BK	BK PG	CRW CHG	CPYRIGHT	DATE	REV. BY	DATE	REV. BY	DATE	REV. BY	DATE	REV. BY
				07/24/09	CMK		CMK		CMK		CMK
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				07/24/09	CMK		CMK		CMK		CMK
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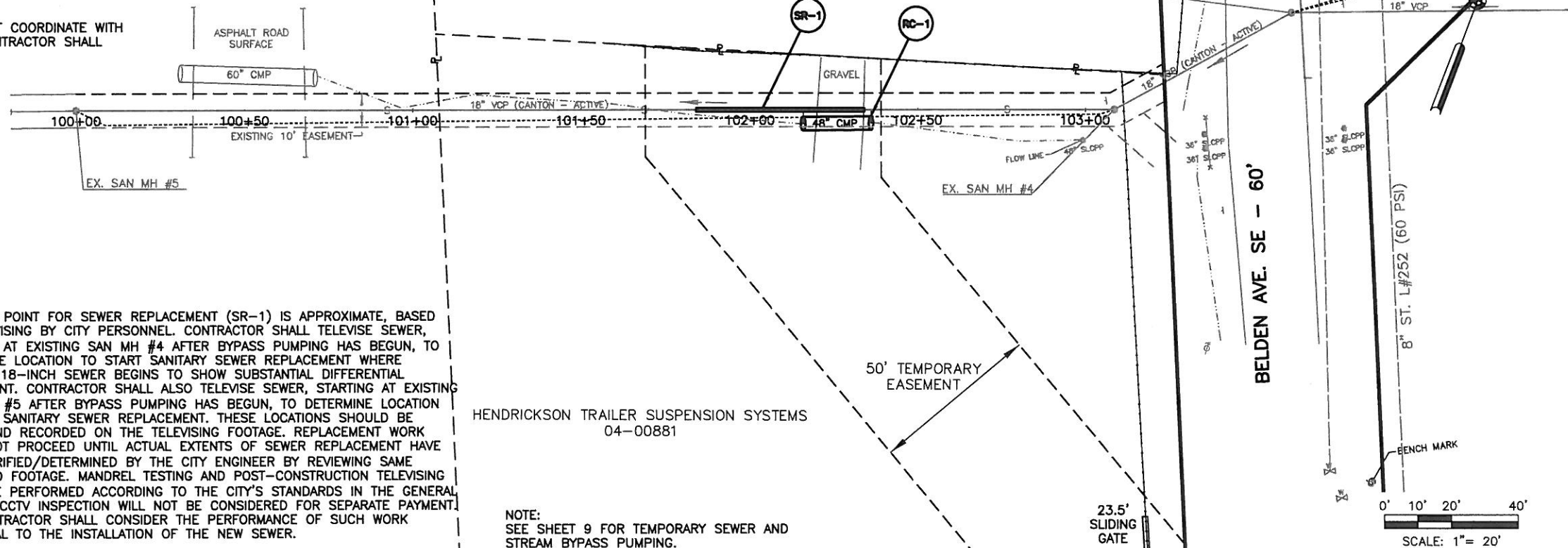
SCALES
HORIZ: N/A
VERT: N/A
CONTOUR: INT: N/A

STANDARD DETAILS/QUANTITIES
GP 1137-WAYNESBURG DRIVE SE
SANITARY SEWER REHABILITATION
FOR: THE CITY OF CANTON
LOCATED IN THE CITY OF CANTON/CANTON TOWNSHIP
SECTION 14 NW, STARK COUNTY, OHIO

NOTE:
CONTRACTOR SHALL REPLACE 48" CMP CULVERT PIPE (RC-1) WITH ODOT 603 MATERIAL IN ACCORDANCE WITH ODOT 707.33. SURFACE OVER TOP OF CULVERT PIPE SHALL BE RESTORED TO ITS ORIGINAL DEPTH, WIDTH AND COMPOSITION.

NOTE:
SLIDING GATE IS 23.5 FEET WIDE. THE CONTRACTOR MUST COORDINATE WITH PROPERTY OWNER TO OBTAIN KEY TO UNLOCK GATE. CONTRACTOR SHALL LOCK GATE WHEN WORK IS NOT BEING PERFORMED.

MAINCON REALTY LTD.
04-00880



NOTE:
STARTING POINT FOR SEWER REPLACEMENT (SR-1) IS APPROXIMATE, BASED ON TELEVISION BY CITY PERSONNEL. CONTRACTOR SHALL TELEVISION SEWER, STARTING AT EXISTING SAN MH #4 AFTER BYPASS PUMPING HAS BEGUN, TO DETERMINE LOCATION TO START SANITARY SEWER REPLACEMENT WHERE EXISTING 18-INCH SEWER BEGINS TO SHOW SUBSTANTIAL DIFFERENTIAL SETTLEMENT. CONTRACTOR SHALL ALSO TELEVISION SEWER, STARTING AT EXISTING MANHOLE #5 AFTER BYPASS PUMPING HAS BEGUN, TO DETERMINE LOCATION TO STOP SANITARY SEWER REPLACEMENT. THESE LOCATIONS SHOULD BE NOTED AND RECORDED ON THE TELEVISION FOOTAGE. REPLACEMENT WORK SHALL NOT PROCEED UNTIL ACTUAL EXTENTS OF SEWER REPLACEMENT HAVE BEEN VERIFIED/DETERMINED BY THE CITY ENGINEER BY REVIEWING SAME TELEVISION FOOTAGE. MANDREL TESTING AND POST-CONSTRUCTION TELEVISION SHALL BE PERFORMED ACCORDING TO THE CITY'S STANDARDS IN THE GENERAL NOTES. CCTV INSPECTION WILL NOT BE CONSIDERED FOR SEPARATE PAYMENT. THE CONTRACTOR SHALL CONSIDER THE PERFORMANCE OF SUCH WORK INCIDENTAL TO THE INSTALLATION OF THE NEW SEWER.

HENDRICKSON TRAILER SUSPENSION SYSTEMS
04-00881

NOTE:
SEE SHEET 9 FOR TEMPORARY SEWER AND STREAM BYPASS PUMPING.

BENCHMARK:

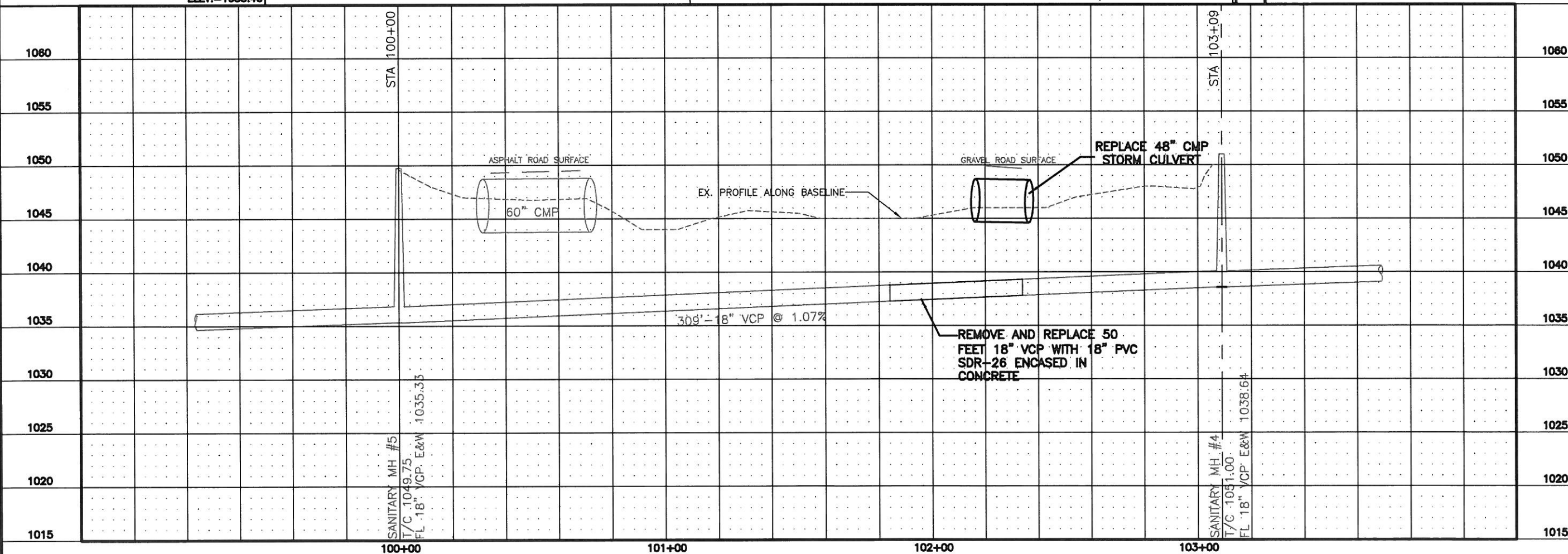
"X" CHISELED ON NORTH BOLT OF FIRE HYDRANT ON EAST SIDE OF BELDEN AVENUE ±150' SOUTH OF ED STEIN DRIVE

ELEV.=1052.43

BENCHMARK:

NORTH RIM OF THE MONUMENT BOX AT THE E ED STEIN DRIVE AND ±200' WEST OF STATE ROUTE 43

ELEV.=1053.40



HAMMONTREE & ASSOCIATES, LTD.
ENGINEERS, PLANNERS, SURVEYORS
CANTON-AKRON-PITTSBURGH

5233 STONHAM ROAD NORTH CANTON, OHIO 44705
CANTON: (330) 498-8817 FAX: (330) 498-8817
TOLL FREE: 1-800-384-8817 www.hammontree-engineers.com

DESIGN BY: CLK
DRAWN BY: CLK
CHKD BY: TRP
RVD BY: TRP
DATE: 07/24/09

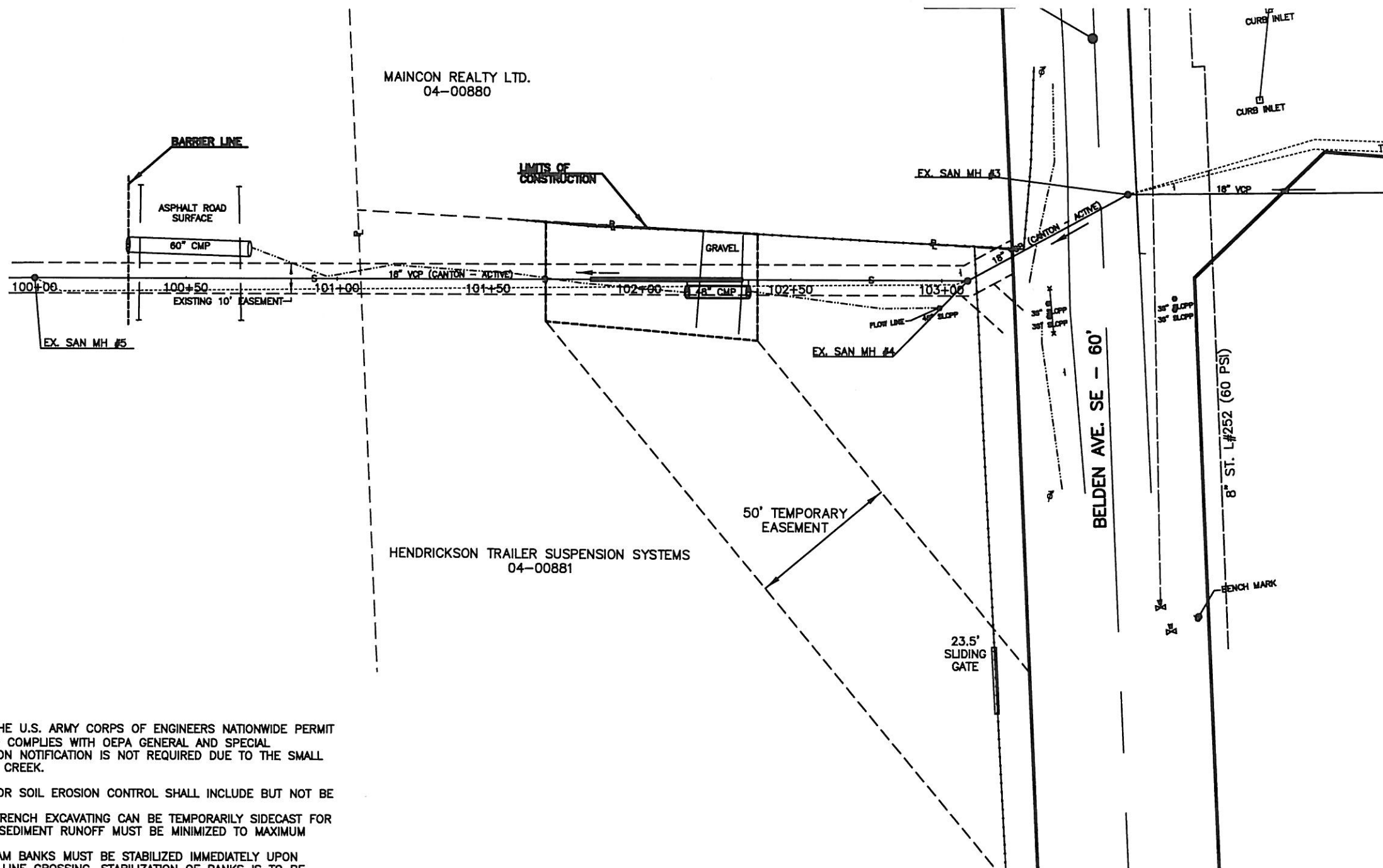
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CRW CHG: JLS
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REV. DATE: 11/11/10
REV. BY: CLK
REV. DATE: 9/29/09
REV. BY: CLK
REV. DATE: 9/11/09

PP-20

SCALES
HORIZ: 1"=20'
VERT: 1"=5'
CONTOUR: INT: 1'

SEWER REHABILITATION
GP 1137-WAYNESBURG DRIVE SE
SANITARY SEWER REHABILITATION
FOR THE CITY OF CANTON
LOCATED IN THE CITY OF CANTON/CANTON TOWNSHIP
SECTION 14 NW, STARK COUNTY, OHIO

8
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NOTE:
THIS PROJECT COMPLIES WITH THE U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT #12-UTILITY LINE ACTIVITIES AND COMPLIES WITH OEPA GENERAL AND SPECIAL LIMITATIONS. A PRE-CONSTRUCTION NOTIFICATION IS NOT REQUIRED DUE TO THE SMALL SCALE OF DISTURBANCE OF THE CREEK.

BEST MANAGEMENT PRACTICES FOR SOIL EROSION CONTROL SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

- MATERIAL RESULTING FROM TRENCH EXCAVATING CAN BE TEMPORARILY SIDECAST FOR NO MORE THAN 3 MONTHS. SEDIMENT RUNOFF MUST BE MINIMIZED TO MAXIMUM EXTENT PRACTICAL.
- EXPOSED SLOPES AND STREAM BANKS MUST BE STABILIZED IMMEDIATELY UPON COMPLETION OF THE UTILITY LINE CROSSING. STABILIZATION OF BANKS IS TO BE ACCOMPLISHED BY SEEDING AND ESTABLISHING VEGETATION, PLANTING OF NATIVE TREE OR SHRUB SPECIES WITH RAPID GROWTH CHARACTERISTICS, ROCK CHANNEL PROTECTION AND/OR OTHER SLOPE STABILIZING METHODS.
- CONDUCT WORK DURING LOW FLOW CONDITIONS IF PRACTICAL.
- TOTAL WIDTH OF EXCAVATION SHALL NOT EXCEED 50' IN THE STREAMBED.
- RESTORE THE STREAM BED AND SUBSTRATES TO CONDITIONS THAT EXIST PRIOR TO WORK.
- CONSTRUCTION EQUIPMENT SHALL NOT BE PLACED BELOW THE ORDINARY HIGH WATER MARK EXCEPT WHEN NO OTHER ALTERNATIVE IS PRACTICAL.
- REPRESENTATIVES OF OEPA WILL BE PERMITTED TO INSPECT THE SITE.
- OEPA-NOTICE OF INTENT IS NOT REQUIRED DUE TO THE EARTH DISTURBED AREA BEING LESS THAN 1 ACRE.
- OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND DUST GENERATION SHALL BE MINIMIZED.
- TRENCH AND GROUND WATER CONTROL: THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS OF THE STATE RESULTING FROM DEWATERING ACTIVITIES. IF TRENCH OR GROUND WATER CONTAINS SEDIMENT, IT MUST PASS THROUGH A SEDIMENT SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE, PRIOR TO BEING DISCHARGED FROM THE CONSTRUCTION SITE. ALTERNATIVELY, SEDIMENT MAY BE REMOVED BY SETTLING IN PLACE OR BY DEWATERING INTO A SUMP PIT, FILTER BAG OR COMPARABLE PRACTICE. GROUND WATER DEWATERING WHICH DOES NOT CONTAIN SEDIMENT OR OTHER POLLUTANTS IS NOT REQUIRED TO BE TREATED PRIOR TO DISCHARGE. HOWEVER, CARE MUST BE TAKEN WHEN DISCHARGING GROUND WATER TO ENSURE THAT IT DOES NOT BECOME POLLUTANT-LADEN BY TRAVERSING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES.

0' 10' 20' 40'
SCALE: 1" = 20'

HAAMONTREE & ASSOCIATES, LTD. ENGINEERS, PLANNERS, SURVEYORS CANTON-ARON-PITTSBURGH	
8233 STONEHAM ROAD NORTH CANTON, OHIO 44720 CANTON: (330) 498-8817 ARON: (330) 498-8817 TOLL FREE: 1-800-394-8817 FAX: (330) 498-0149 www.haamontree-engineers.com	
DESIGN BY: CAK	DATE: 07/24/09
DRWN BY: CAK	DATE: 07/24/09
CHKD BY: TRP	DATE: 07/24/09
RYMD BY: TRP	DATE: 07/24/09
FLD BKG: 541	DATE: 07/24/09
BK PG: 02	DATE: 07/24/09
CRW CHG: JLS	DATE: 07/24/09
CPYRIGHT: 2009	DATE: 07/24/09
PP: 20	DATE: 07/24/09
GENERAL NOTES GP 1137-WAYNESBURG DRIVE SE SANITARY SEWER REHABILITATION FOR: THE CITY OF CANTON LOCATED IN THE CITY OF CANTON/CANTON TOWNSHIP, SECTION 14 NW, STARK COUNTY, OHIO	
SCALES HORIZ: 1" = 20' VERT: N/A CONTOUR INT: 1'	
10 10	